

Bootstrap Analyses

In the main manuscript, we reported results indicating that people with MDD have less differentiated unpleasant emotional experiences than do their healthy peers. We reached this conclusion by calculating the correlations among a set of 4 pleasant and 7 unpleasant emotion adjectives that participants used to rate their momentary emotional experience. In order to show that our results are not due simply to the difference in the number of pleasant and unpleasant emotion adjectives, we conducted a bootstrap analysis. In this analysis, we conducted t-tests comparing people with depression and healthy controls for all possible 4-adjective subsets of the 7 emotion adjectives. 97.1% of the t-tests yielded p-values <0.05 , indicating that the difference in emotional differentiation between people with depression and healthy controls is robust across various emotion adjectives, and that it is not an epiphenomenon of the larger number of unpleasant emotion adjectives. We also provide Table S3, which shows the degree to which individual emotion adjectives are differentiated from one another. This table also shows that the difference in differentiation between people with depression and healthy controls is pervasive across all emotion adjectives.

Furthermore, in our study, there was one person with depression who had 3 pleasant emotion adjectives with zero temporal variance and 5 healthy controls with 6 unpleasant emotion adjectives with zero temporal variance. We excluded these participants from analyses in the manuscript because emotion differentiation scores could not be calculated for them. In order to ensure that pruning these individuals from our participant pool did not lead to differences between groups in emotion differentiation, we conducted a separate bootstrap analysis. In this analysis, 1 healthy control and 5 people with depression were randomly selected to be pruned from the participant pool. Then the emotion differentiation calculations were computed for the remainder of the participants. This random selection procedure was carried out 1000 times. Of these 1000 instances, 973 yielded a significant difference in emotion differentiation between people with depression and healthy controls. This shows that our findings are robust (97.3%) and not epiphenomenally linked to the between-group differences in the likelihood to report nonzero values for the emotion ratings.

In order to ensure the robustness of our findings, we took the bootstrap analyses a step further. In this set of bootstrap analyses we carried out a more refined matching process. For every i number of healthy controls who had zero temporal variance for j emotion ratings, we randomly selected i people with depression and randomly excluded j of their emotion ratings. This procedure was carried out to ensure that the healthy controls and people with depression were matched in psychometric properties that could confound the results. The random selection process was executed 1000 times, and for 964 of the instances, people with MDD had less differentiated unpleasant emotional experiences than did their healthy peers. This further shows that our findings are robust ($>96\%$) and that they are not epiphenomenally linked to between group-differences in emotion reporting behavior.